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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,973	03/31/2004	Frank Dumont	PA030012	5919

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JOSEPH J. LAKS, VICE PRESIDENT  
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EXAMINER
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TRAN, TRANG U

ART UNIT	PAPER NUMBER
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2622

MAIL DATE	DELIVERY MODE
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09/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/813,973

Applicant(s)

DUMONT ET AL.

Examiner

Trang U. Tran

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2007 and 25 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed March 9, 2007 and June 25, 2007 have been fully considered but they are not persuasive.

In re pages 5-6, applicant argues that Oya neither discloses nor suggests "processing means receiving the video signal and outputting an encoded stream based on the video signal" as recited in claim 1 of the present invention because the digital demodulator of Oya "demodulates the input signal into an image signal" but does NOT output an encoded stream based on the video signal as in the processing means of present claimed invention. Demodulation, removing modulation from an analog signal, is not the same as encoding, which is the process of transforming information from one format into another.

In response, the examiner respectfully disagrees. As recognized by applicant, encoding is defined as transforming information from one format into another. The digital demodulator 16 of Oya does indeed transform video signal from one format to another. Thus, the claimed "processing means receiving the video signal and output and encoded stream based on the video signal" is anticipated by Oya's digital demodulator because the demodulator transforms information from one format to another.

In re pages 6-7, applicant argues that Oya neither discloses nor suggests the claimed "control means for adjusting the processing means based on the indicator" as recited in claim 1 of the present invention.

In response, the examiner respectfully disagrees. It is noted that the IF AGC amplifier 14 of Oya control the tuner 12 and that the digital demodulator demodulates the video signal output from the tuner 12. Thus, the IF AGC controls the processing means (the digital demodulator 16) because the IF AGC controls the tuner, which outputs the video signal to digital demodulator.

In re page 7, applicant argues, with respect to claim 2, Oya neither discloses nor suggests "means for adjusting the adjustable filter based on the indicator" as recited in claim 2 of the present invention.

In response, the examiner respectfully disagrees. As discussed above the IF AGC amplifier 14 controls the tuner 12 and the tuner 12 is the filter. Thus, the claimed "adjustable filter" is anticipated by the tuner 12 and the IF AGC controls the "adjustable filter" (the tuner 12).

In re pages 7-8, applicant argues, with respect to claim 3, Oya neither discloses nor suggests "the receiver outputs the video signal as an analogue signal and wherein a video decoder converts the analogue signal into a digital stream" as recited in claim 3 of the present invention.

In response, the examiner respectfully disagrees. The receiver of Oya outputs the video signal as an analogue (the output of the IF AGC amplifier 14) and the ADC 15 converts the analogue signal into a digital stream. Thus, Oya does indeed discloses the claimed "the receiver outputs the video signal as an analogue signal and wherein a video decoder converts the analogue signal into a digital stream".

In re page 8, applicant argues, with respect to claim 4, Oya neither discloses nor suggests "the video decoder comprises the adjustable filter" as recited in claim 4 of the present invention.

In response, the examiner respectfully disagrees. As discussed above, the claimed "adjustable filter" is anticipated by the tuner 12 of Oya.

In re page 8, applicant states that claims 6-10 are dependent on claim 1 and are considered patentable for the reasons presented above with regard to claim 1.

In response, as discussed above with respect to claim 1, Oya discloses all the claimed limitations of claim 1.

In re pages 9-10, applicant argues, with respect to claim 5, that the combined system of Krishnamurthy and Oya would neither disclose nor suggest "an encoder having an adjustable encoding bit-rate and wherein the control means includes means for adjusting the encoding bit-rate based on the indicator" as recited in claim 5 of the present invention.

In response, the examiner respectfully disagrees. Krishnamurthy discloses in col. 4, lines 7-25 that the encoding bit-rate is control by the VSB mode and the encoder of Oya is controlled based on the indicator. When Krishnamurthy and Oya are combined as proposed, the bit-rate of Krishnamurthy will be controlled by the indicator.

In re page 10, applicant states that claims 11-15 are dependent on claims 1 and 5 and are considered patentable for the reasons presented above with regard to claims 1 and 5.

In response, as discussed above with respect to claims 1 and 5 the proposed combination of Krishnamurthy et al and Oya discloses all the claimed limitations of claim 5 and Oya discloses all the claimed limitations of claim 1.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4 and 6-10 are rejected under 35 U.S.C. 102(e) as being anticipate by Oya (US Patent No. 6,421,098 B1).

In considering claim 1, Oya discloses all the claimed subject matter, note 1) the claimed a receiver for converting an RF signal into a video signal is met by the digital television signal receiver (Fig. 3, col. 3, line 62 to col. 4, line 50), 2) the claimed processing means receiving the video signal and outputting an encoded stream based on the video signal is met by the digital demodulator 16 (Fig. 3, col. 4, lines 9-50), 3) the claimed an indicator of a characteristic of the RF signal is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50), and 4) the claimed control means for adjusting the processing means based in the indicator is met by the IF AGC amplifier 14 (Fig. 3, col. 4, line 9 to col. 6, line 32).

In considering claim 2, the claimed wherein the processing means includes an adjustable filter and wherein the control means includes means for adjusting the adjustable filter based on the indicator is met by the IF AGC amplifier 14 (Fig. 3, col. 4, line 9 to col. 6, line 32).

In considering claim 3, the claimed wherein the receiver outputs the video signal as an analogue signal and wherein a video decoder converts the analogue signal into a digital stream is met by the digital demodulator 16 (Fig. 3, col. 4, lines 9-50).

In considering claim 4, the claimed wherein the video decoder comprises the adjustable filter is met by the digital demodulator 16 (Fig. 3, col. 4, lines 9-50).

In considering claim 6, the claimed wherein the characteristic is the amplitude of the RF signal is met by the IF AGC amplifier 14 (Fig. 3, col. 4, line 9 to col. 6, line 32).

In considering claim 7, the claimed wherein the indicator is a voltage controlling the gain of an amplifier of the receiver is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50).

In considering claim 8, the claimed wherein the receiver comprises a tuner which outputs an IF signal and wherein the indicator is the amplitude of the IF signal is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50).

In considering claim 9, the claimed wherein the control means comprises a micro-processor is met by the microcomputer 24 (Fig. 4, col. 4, line 51 to col. 6, line 32).

In considering claim 10, the claimed wherein the micro-processor has means for receiving a signal representative of the indicator and means for sending control data to adjust the processing means is met by the microcomputer 24 (Fig. 4, col. 4, line 51 to col. 6, line 32).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oya (US Patent No. 6,421,098 B1) in view of Krishnamurthy et al. (US Patent No. 5,508,748).

In considering claim 5, Oya discloses all the limitations of the instant inventions as discussed in claim 1 above, except for providing the claimed wherein the processing means includes an encoder having an adjustable encoding bit-rate and wherein the control means includes means for adjusting the encoding bit-rate based on the indicator. Krishnamurthy et al teach that the offset 10-bits symbols are then applied through frame formatter 15 to D/A converter 16 where they are converted to analog form for transmission by VSB transmitter 17, also, it will be observed that the data rate characterizing each VSB mode increases by one bit per symbol relative to the data rate of the immediately lower VSB mode while its S/N ratio performance is reduced by one-half (col. 3, col. 4, line 7 to col. 5, line 55). Therefore, it would have been obvious to one

ordinary skill in the art at the time of the invention to incorporate the encoded bit-rate as taught by Krishnamurthy et al into Oya's system in order to provide a simplified level selection system for transmission and reception of a digital information signal having a variable data constellation.

In considering claim 11, the claimed wherein the characteristic is the amplitude of the RF signal is met by the IF AGC amplifier 14 (Fig. 3, col. 4, line 9 to col. 6, line 32 of Oya).

In considering claim 12, the claimed wherein the indicator is a voltage controlling the gain of an amplifier of the receiver is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50 of Oya).

In considering claim 13, the claimed wherein the receiver comprises a tuner which outputs an IF signal and wherein the indicator is the amplitude of the IF signal is met by the tuner 12 which controls the gain of the IF signal based on RF AGC signal transmitted from the IF AGC amplifier 14 (Fig. 3, col. 3, line 62 to col. 4, line 50 of Oya).

In considering claim 14, the claimed wherein the control means comprises a micro-processor is met by the microcomputer 24 (Fig. 4, col. 4, line 51 to col. 6, line 32 of Oya).

In considering claim 15, the claimed wherein the micro-processor has means for receiving a signal representative of the indicator and means for sending control data to adjust the processing means is met by the microcomputer 24 (Fig. 4, col. 4, line 51 to col. 6, line 32 of Oya).

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 17, 2007



TRANG U. TRAN  
PRIMARY PATENT EXAMINER